Amendments to the Specification:

Please replace paragraphs [0048] to [0051] with the following amended paragraphs:

[0048] figures 2 to 5 ~~2A to 2D~~ illustrate steps in the assembly of the impeller in the impeller device according to figure 1;

[0049] figures 6 and 7 ~~3A and 3B~~ illustrate steps in the assembly of the impeller in another example of an impeller device according to the invention;

[0050] figure 8 ~~4~~ shows a section through another example of an impeller device according to the invention;

[0051] figure 9 ~~5~~ shows a data acquisition instrument placed in a hydrocarbon well equipped with several impeller devices according to the invention.

Please replace paragraph [0061] with the following amended paragraph:

[0061] The support 3 of the impeller is in the shape of a stirrup with two ends 20. Its profile is aerodynamic to minimize disturbance to the fluid flow in the well. It may be made of metal, for example INCONEL® ~~Inconel~~ (registered trademark of the INCO Limited Company) which is an alloy made of nickel, chromium and molybdenum. In its medium part, it comprises an orifice 3.1 that can be attached to a data acquisition instrument like that shown in figure 5.

Please replace paragraph [0066] with the following amended paragraph:

[0066] The fixed bearing block 4.1 stops in contact with shoulder 22 of the support 3. It is held in this position by the chamber 80 in which the sensor 8 is located (figure 2 ~~2A~~). The chamber 80 is screwed into the hole 21 that is threaded. The velocity sensor 8 is then located along the spindle of the impeller 1.

Please replace paragraphs [0068] and [0069] with the following amended paragraphs:

[0068] When the mobile bearing block 4.2 is installed, it is placed sufficiently remote from the fixed bearing block 4.1 such that the spindle 2 of the impeller 1 can be inserted between

the two bearing blocks 4.1 and 4.2. This is done by screwing its base 4.3 into the hole 24 so that it penetrates sufficiently into the hole 24 (figure 2 ~~2A~~).

[0069] The spindle 2 of the impeller 1 is inserted between the two bearing blocks 4.1 and 4.2. The ends 5 of the spindle 2 penetrate into the recesses 6 that are approximately conical (figure 3 ~~2B~~).

Please replace paragraph [0071] with the following amended paragraph:

[0071] A stop 11 is then inserted in the hole 24 of the mobile bearing block 4.2 such that the shim 10 is trapped between the mobile bearing 4.2 and the stop 11 (figure 4 ~~2C~~).

Please replace paragraph [0073] with the following amended paragraph:

[0073] The shim 10 (figure 5 ~~2D~~) is removed and the mobile bearing block 4.2 is moved backwards until it comes into contact in stop on the expandable sleeve 11 (figure 1) in a third position. It takes the place of the shim 10. The mobile bearing block 4.2 is then blocked.

Please replace paragraph [0076] with the following amended paragraph:

[0076] Figures 6 and 7 ~~3A and 3B~~ show a variant of the means used to form a predetermined clearance between the spindle 2 and the bearing blocks 4.1 and 4.2.

Please replace paragraph [0079] with the following amended paragraph:

[0079] Figures 6 and 7 ~~3A and 3B~~ show the first relief 31 of the dog 37 in the form of two diametrically opposite grooves on each side of the rod 30 and the second relief 33 of the dog 37 in the form of two diametrically opposite mouldings. The reverse will be possible, the grooves could be on the stop and the mouldings could be on the base.

Please replace paragraph [0081] with the following amended paragraph:

[0081] The assembly thus described is inserted free to move in the hole 24 of the support 3, the spindle 2 of the impeller is inserted in the space 23, the mobile bearing block 4.2 is brought close to the fixed bearing block (not shown) and is pushed into contact with spindle 2 with almost no clearance. The relief 31 and the relief 33 of the dog 37 do not coincide. The stop 32 is held in position with respect to the support 3 both in translation and in rotation using a blocking means 39, for example a needle screw type (figure 6 ~~3A~~).

Please replace paragraph [0085] with the following amended paragraph:

[0085] Figure 8 ~~4~~ shows such a configuration.

Please replace paragraph [0089] with the following amended paragraph:

[0089] Figure 9 ~~5~~ diagrammatically shows an example of a data acquisition instrument 50 of the type presented in patent application FR-A 2 797 295. It comprises at least one impeller device 51 like that described above. The instrument 50 is lowered into an inclined or even approximately horizontal hydrocarbon well 52. The instrument 50 is connected to the surface by a rod or a cable not shown. The data acquired in the instrument 50 are transmitted to the surface by the cable, the rod or by telemetry. The instrument 50 comprises an approximately cylindrical body 53 with a diameter less than the diameter of the well 52. The body 53 is fixed to a deployable mechanism 54. The deployable mechanism 54 comprises two arms 55 articulated with each other and with the body 53. The body 53 is supported on the lower wall of the well 52. During deployment, the arms 55 are in shape of a V located in a vertical plane passing through the longitudinal axis of the well 52. The impeller devices 51 are distributed approximately uniformly along one of the arms 55. They are fixed to the arm for example using a split pin 56 that passes through the orifice 3.1 of the support 3. The other arm may be equipped with electrical and / or optical sensors 57 also distributed approximately uniformly along the arm. An impeller device 51 and / or at least one sensor 57 may be placed on the body 53.